STATEMENT OF JOSEPH DEL BALZO, ACTING DEPUTY ADMINISTRATOR OF THE FEDERAL AVIATION ADMINISTRATION, BEFORE THE HOUSE COMMITTEE ON PUBLIC WORKS AND TRANSPORTATION, SUBCOMMITTEE ON AVIATION, CONCERNING AIRPORT CAPACITY NEEDS. FEBRUARY 19, 1992.

Mr. Chairman and Members of the Subcommittee:

I appreciate the opportunity to appear before the Subcommittee today to discuss with you the capacity needs of our Nation's air transportation system and to describe ongoing FAA initiatives to meet those needs. Joining me today are Leonard Griggs, Assistant Administrator for Airports, and Dale McDaniel, Deputy Assistant Administrator for Policy and International Aviation.

As the Members of this Subcommittee know well, increased growth in commercial and general aviation air traffic continues to place increasing demands on our air transportation system. In 1990, for example, there were 454 million passenger enplanements; by the year 2000, this will grow to nearly 732 million—an increase of 61 percent. In 1990, 23 of our top 100 airports experienced more than 20,000 hours of airline flight delays; 40 airports may fall into that category by the year 2000. It is clear that, without substantial improvements in system capacity, air carriers, travelers, and businesses alike will face added costs and increased delays.

The need for capacity enhancement is not a new phenomenon, but, despite a concerted effort to address this issue over a period of years, much more work remains to be done if we are to meet a very difficult challenge. The FAA has been at the heart of this issue, and is committed to working closely with communities and aviation leaders throughout the Nation to continue to make needed progress in this complex area.

For our part, we are firmly committed to infrastructure, technological, and procedural improvements in our air transportation system to respond to current and future demands. Our reathorization proposal, which will shortly be transmitted to the Congress, provides a solid funding baseline that will provide for a continued strong Federal role in pressing for capacity improvements through airport grant funding, a strong facilities and equipment program, and research, engineering, and development efforts.

I would like to briefly review some of the efforts that are underway to improve system capacity to reduce airport congestion and delay.

One key initiative involves what you might consider a "micro" look at delay and congestion problems. Since 1985, we have cosponsored Airport Capacity Design Teams—comprised of Federal, State, and local officials, along with members of the local aviation community—whose purpose is to take a hard look at individual airports, from a layout, equipment, airspace, and procedural perspective, in order to identify what specific steps will increase capacity. In my view, these efforts have proven quite successful, facilitating individual airport improvements that contribute, in turn, to increasing the efficiency of the national system. To date, 29 teams have been formed at airports across the Nation. Twenty—two teams have completed their efforts, while 7 efforts are still ongoing.

An example of one significant team effort was at the Atlanta-Hartsfield International Airport. There the team recommended a number of airfield improvements, including the establishment of a new runway and taxiways. When these recommendations are all put in place, the team's estimate is that the Atlanta airport may realize a delay-related cost savings of \$220 million. Even greater savings are possible at the Phoenix-Sky Harbor International Airport, where a team recommended improved and new taxiways, a new runway, additional approach aids, and establishment of more efficient airfield operational procedures.

As a direct result of team efforts, more than 800 projects, ranging from improvements in airport facilities and landing areas, the establishment of new approach aids, and procedural changes for landside and airside operations, have been recommended to increase airport capacity. More than 150 of these recommendations have already been implemented.

Looking at the bigger picture, we are pleased that important initiatives are under consideration or underway at airports throughout the country. Sixty-two of the top 100 airports have proposed new runways or extensions, and 18 of the 23 airports, which exceeded 20,000 hours of delay in 1990, are in the process of constructing or planning runway improvements. Of the 109 known runway improvement projects, 77 have approved airport layout plans, 26 are known to have completed an environmental impact statement, 15 have completed an application for Airport Improvement Program (AIP) grants, and 14 have begun construction.

In addition to new construction efforts at existing airports, new airport construction is being considered by a number of communities. When the new Denver Airport is completed in October 1993, it will have the capacity to handle over 22 million passenger emplanements annually. In contrast, the existing Denver Stapleton International Airport handled 12.8 million emplanements in FY 1990.

The FAA's level of support for this new airport includes approximately \$500 million in AIP grants, and another \$200 million for facilities and equipment. We believe the positive contribution this airport will make to system capacity warrants this level of commitment. In addition, the community of Denver will benefit from a significant noise reduction once the new airport is completed.

The FAA's Office of Systems Capacity and Requirements continues to play an active role in facilitating the identification and planning of capacity improvements. We are currently preparing the 1992 Aviation System Capacity Plan, which constitutes a comprehensive review of capacity-enhancing programs. This Plan embodies a "ground-up" approach to improving capacity--integrating airport and airspace needs--and identifies the causes and extent of capacity and delay problems currently associated with air travel. The Plan outlines current and planned FAA initiatives to reduce the severity of congestion and delays in the future.

The FAA recognizes the importance of both near and long-term capacity initiatives in supporting the revitalization of our Nation's economy. We believe that the near-term capacity increases, those that we anticipate being available for use within the next year, are particularly important in providing some

operational and economic benefits for airspace system users.

Near-term capacity initiatives promise arrival rate increases ranging from four aircraft per hour up to 18 aircraft per hour. These increases offer the promise of substantial savings in fuel, crew and aircraft operating costs, and in time saved for the air traveler. The annual savings in airplane operating costs alone can approach several million dollars at each airport.

We are also improving our National Plan of Integrated Airport Systems (NPIAS) to highlight capacity improvement projects. NPIAS includes eligible airport development work over the next 10 years to meet forecast demands for air transportation. The Plan includes the needs of airports that account for an estimated 88 percent of general aviation and nearly all operations of scheduled air carriers: The estimate of needs is drawn primarily from airport master plans developed by local airport officials working in close cooperation with FAA. Development in excess of a basic airport configuration must be justified by special circumstances such as high activity levels or use by large aircraft. In the next publication, this Plan will for the first time identify needed development that has not yet been identified at the local level but that FAA believes may be necessary to retain current performance at the largest airports. In addition, NPIAS will also distinguish among the types of airports and development work, including the specific categorization of capacity enhancement development, to provide decision-makers better and more readily

We are also moving forward with our Military Airport Program. Seven former military airports have already been identified as good candidates to provide congestion relief to other airports, including a number of the airports expected to experience over 20,000 hours of delays by the year 2000. During FY 92, we will allocate \$28.5 million, or 1.5 percent of our AIP assets, to converting these former military air fields to civilian use. In addition, approximately 25 military airfields will be declared surplus over the next 5 years. We are working closely with the Department of Defense and local governments to convert these valuable assets to civil use.

We also continue to be an active partner in planning and supporting airport capacity initiatives through our Airport Improvement Program (AIP). For FY 1993, the President's Budget seeks \$1.9 billion in new AIP grants for airports. This budget request will build on the \$735.2 million, or approximately 20 percent of available AIP funds, that were allocated in FY 91 and 92 for capacity projects.

With the key support of this Subcommittee, airports now have another tool available to support capacity enhancing projects--Passenger Facility Charges (PFC). We remain confident that PFCs will be a major source of funding for a variety of

important airport-related projects, including much needed capacity-enhancing measures. PFCs are expected to add up to an additional \$1 billion dollars each year for airport improvement and capacity-related projects. We began accepting PFC applications on September 25, 1991, and have received 20 applications to date. On January 22, we approved a PFC proposal for Savannah, Georgia, that will help finance a new terminal building, an aircraft parking apron, taxiways, and new entrance and service roads.

We have the support of the users whose input we have channeled through the Aviation System Capacity Advisory Committee. Composed of representatives of the air carriers, airports, aircraft manufacturers, pilots, and other users, the Committee has provided invaluable advice on industry priorities for increasing capacity. It has also been a conduit for sharing information, such as the cooperative research and development agreement we recently concluded with the Air Transport Association to share information from our Aircraft Situation Display (ASD). The ASD depicts all en route aircraft in the United States, including altitude and aircraft identification, updated every 5 minutes. With this information, airline planners can do better route planning around severe weather problems and improve safety, efficiency, and fuel In the near term, we intend to enlarge the committee's role to help us define what the system of the future should look like and identify the programs that are needed to fulfill that vision.

We have also worked actively to develop and test equipment that offers the opportunity for increasing efficiency at our Nation's airports. Initial testing of Precision Runway Monitors, which employ advanced technology to improve parallel runway approaches, indicates the possibility of a 30 percent capacity improvement at certain airports during adverse weather by increasing aircraft arrival rates. We plan to install five of these systems between 1993 and 1995. By using a curved approach, rather than the straight-in approach required by the ILS system, the MLS will provide much greater flexibility in designing aircraft approaches to airports and permit greater efficiency in handling larger numbers of aircraft within existing airspace. Further, MLS also offers the possibility of lower approach minima, which can increase aircraft operations in poor weather.

We are also assessing the extent to which the Traffic Alert and Collision Avoidance System (TCAS) can support reduced spacing on approaches, which would permit better utilization of airspace by more aircraft. We are also evaluating the Converging Runway Display Aid (CRDA), which uses automation to display an aircraft's relative position to other aircraft. Simulations have shown that this aid may increase capacity by allowing multiple runways to be used simultaneously in poorer weather than can now be accommodated.

The FAA is also employing its research, engineering, and development capabilities to meet the pressing capacity needs of the 21st Century and to provide a comprehensive upgrading of our air traffic control system. The Terminal ATC Automation (TATCA) is one such project. Under TATCA, projects are being developed to enhance terminal area management procedures and facilitate early implementation of controller aids at busy airports. Projects currently in the TATCA program include the Converging Runway Display Aid, which I mentioned a moment ago, and the Center-TRACON Automation System. Longer term TATCA activities include the integration of terminal automation techniques with other air traffic control capabilities.

Another R,ESD project, targeted at improving our en route airspace capacity, is the Automated En Route Air Traffic Control (AERA) program. Begun in 1987, AERA is a collection of automation capabilities to enable controllers to detect and resolve problems along an aircraft's flight route, and plan efficient air traffic flows. The next phase of this program, scheduled to continue through 1997, is the development of computer software and operational evaluation. Within a month, we plan to release a document which will describe, in layman's terms, our ongoing program for near term capacity improvement. Both the quality and cost of air service are closely related to aviation system capacity, and will continue to improve only if that capacity continues to grow.

In closing, Mr. Chairman, I would stress the importance of a collective, well planned, and strong effort to increase capacity in our Nation's air transportation system. Aviation is a crucial part of the economic base in this country, and the extent to which we can provide safe and efficient air service to our businesses, travelers, and consumers in the future will have a very real and direct impact on our long-term economic well-being.

Mr. Chairman, that concludes my prepared statement. We would be pleased to answer any questions you may have.